



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

SW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/713,749	11/14/2000	Daniel M. LaFontaine	259/012	6224

7590

07/14/2004

David T. Burse  
Bingham McCutchen LLP  
Three Embarcadero Center  
Suite 1800  
San Francisco, CA 94111-4067

EXAMINER
----------

FARAH, AHMED M

ART UNIT	PAPER NUMBER
----------	--------------

3739

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/713,749

Applicant(s)

LAFONTAINE ET AL.

Examiner

Ahmed M Farah

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 64-70, 72-79 and 81-87 is/are pending in the application.
- 4a) Of the above claim(s) 64-69 and 77 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 70, 72-75, 79, 81, 82 and 85-87 is/are rejected.
- 7) ☒ Claim(s) 76, 78, 83 and 84 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Allowable Subject Matter*

1. The indicated allowability of claims 70 and 72-75 are withdrawn in view of the newly discovered reference(s) to Geddess et al. U.S. Patent No. 4,979,948.

Rejections based on the newly cited reference(s) follow.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 79, 81, 82, 86, and 87 are rejected under 35 U.S.C. 102(b) as being anticipated by Qian U.S. Patent No. 5,047,028.

Qian discloses apparatus and method for creating thrombosis of vessel under the surface of a body cavity, the method comprising the steps of:

inserting the distal portion of tubular member **10** into the patient's body, the distal portion comprising an expandable member (balloon **12**) in a collapsed condition (see the abstract; Col. 1, lines 18-23; Col. 2, lines 8-10; and claim 1), and an electrode (conducting wire **16** connected to an external electrode **20**) within an interior space of the expandable member;

Art Unit: 3739

positioning the distal portion of the tubular member proximate a target site (Col. 2, lines 10-11);

directing electrolyte fluid through the lumen of the tubular member and into the interior space of the expandable member (Col. 2, lines 11-15); and

energizing the electrode with electrical energy, thereby transferring electrical energy from the electrode through the expandable member via the electrolyte fluid to ablate the target site (see claim 9),

wherein the expandable member comprises a plurality of perforations (semi-permeable wall) through which the electrolyte fluid flows to the target site (Col. 2, lines 15-19).

In this Office Action, the word **ablation** is defined as 'the surgical excision or amputation of body part or tissue by cutting, heating/coagulating, and/or removing body tissue using mechanical (i.e., ultrasound), electrical and/or optical energy. This interpretation is in line with the common use of the word 'ablation' in the relevant art.

Furthermore, The American Heritage Dictionary of the English Language defines the word **ablate** as "to remove by erosion, melting, evaporation, or vaporization." See the attached page marked **Exhibit 1**. These terms define a process of transformation of (a liquid or sol, for example) into or as if into a soft,

Art Unit: 3739

semisolid, or solid mass,<sup>1</sup> i.e., coagulation. Therefore, Qian teaches a method for ablating body tissue as presently claimed.

Furthermore, the word **thrombosis** is defined as "the formation, presence, or development of a thrombus (A fibrinous clot formed in a blood vessel<sup>i</sup>); the word **clot** is defined as "a thick, viscous, or coagulated mass or lump, as of blood;<sup>iii</sup>" and the word **coagulate** is defined as 'the phase transformation of (a liquid or sol, for example) into a soft, semisolid or solid mass, which results from heating or cooling the mass (a biological tissue in this case).' Hence, since thromboses results from a coagulated/ablated tissue, Qian teaches a method for ablating body tissue.

As to claim 81, the expandable member (balloon 12) of Qian is expanded as the electrolytic fluid is directed into its interior space (Col. 2, lines 13-15).

As to claims 86 and 87, the catheter of Qian is configured to be inserted into a blood vessel. Therefore, it is inherent that catheters designed for use in blood vessels are essentially flexible.

4. Claims 70, 72-75, and 85 are rejected under 35 U.S.C. 102(b) as being anticipated by Geddess et al. U.S. Patent No. 4,979,948.

Geddess et al. teaches method and apparatus for thermally destroying a layer of an organ, the apparatus comprising:

---

<sup>1</sup> *The American Heritage® Dictionary of the English Language, Third Edition* copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from INSO Corporation; United States. All rights reserved.

Art Unit: 3739

a catheter **100** having a proximal end attachable to electrolytic solution, a distal portion sized for insertion of a patient's body (see Fig. 1), and a lumen **103** for delivering fluid from the proximal portion to the distal end;

an expandable member **114** disposed on the distal portion of the catheter and configured to conform and make contact with the body being treated (the distal end of the expandable member takes the shape of the body being treated. For example, if the body being treated is substantially flat, the expandable member takes a substantially planer distal end); and

an RF electrode **104/103** positioned on the distal end of the catheter and communicating with the lumen , the electrode configured for coupling to an external RF source as presently claimed.

The phrase "whereby RF energy may be transferred from the electrode to the selected are ... " in claim 70 is an intended use and therefore not given a patentable weigh. If applicants desire the recited elements to be considered, they must positively recite the limitations within the body of the claim.

As to claim 75, the electrode comprises a plurality of apertures **108**, the apertures allowing electrolyte solution to pass into the interior space of the expandable member.

#### ***Allowable Subject Matter***

5. Claims 76, 78, 83, and 84 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3739

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ahmed M Farah whose telephone number is (703) 305-5787. The examiner can normally be reached on Mon-Thur. 9:30 AM-7:30 PM, and 9:30 AM - 6:30 PM on every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M DVorak can be reached on (703) 308-0994. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. Farah  
Patent Examiner, AU 3739



07/05/2004

## ab·late

**ab·late** (ə·blāt) *verb*

**ab·lat·ed, ab·lat·ing, ab·lates** *verb, transitive*

To remove by erosion, melting, evaporation, or vaporization.

*verb, intransitive*

To become ablated; undergo ablation.

[Back-formation from ablation.]

*The American Heritage® Dictionary of the English Language, Third Edition* copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from INSO Corporation; further reproduction and distribution restricted in accordance with the Copyright Law of the United States. All rights reserved.